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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,435	06/18/2001	Gunther Knebel	KNEBEL ET AL. - 1	2793

7590

09/10/2003

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EXAMINER

ANDERSON, MATTHEW A

ART UNIT

PAPER NUMBER

1765

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/883,435

Applicant(s)

KNEBEL ET AL.

Examiner

Matthew A. Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-36 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-3,5-36 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3,5-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,039,804).

Kim et al. discloses a crystallization tray housing as shown in Figs 1 , 2. Fig 3 shows a side view. Each tray has a plurality of separate crystallization units arrayed as a integral part of it. The units consist of a reservoir and drop chamber around the reservoir. Each drop chamber has a shoulder for placement of a cover slip from which a drop solution for crystal growth can be suspended. (see abstract) The optimization of the geometry of the chamber is suggested in col. 6 lines 8-24. Figs 4 and 5 (see col. 5 lines 25-56) discloses that a drop of solution for crystallization be hung over the central reservoir. Kim suggests using a transparent plastic material.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to produce a reaction vessel (i.e. a tray housing) including a housing for liquid containment with several identical reaction chambers (i.e. crystallization units), each separate, immediately adjacent, which consist of a reservoir and identical

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reaction areas (i.e. drop chambers) in gaseous communication, because such is suggested in Kim et al.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to rearrange the placement of the reaction areas relative to the reservoir because no change as to how the reservoir and the reaction areas coact would be expected and Kim et al. suggests that other geometrical arrangements be used.

In light of this suggestion that other geometrical arrangements be used, it would have been obvious to one of ordinary skill in the art at the time of the present invention to design the reaction vessel with respect to size and shape of the recesses and reaction areas and the number contained in the vessel.

In respect to claims 21-30, 36-38 it would have been obvious to one of ordinary skill in the art at the time of the present invention to include a top part or lid with a reaction area since Kim et al. discloses such. The other limitations are obvious design choices concerning only size and shape of the chambers. Figs 6-7 suggest the design of claim 38.

Response to Arguments

3. Applicant's arguments filed 6/27/2003 have been fully considered but they are not persuasive.

The argument that there is no suggestion to place the reaction chambers immediately adjacent each other in parallel rows is not convincing. The reaction chambers are in parallel rows in the Figs of Kim et al. The reaction chambers are immediately adjacent each other in that no intervening structure other than a wall is seen or suggested by Kim et al.

The argument that the common wall is not described is not convincing. Fig. 6 clearly depicts a common wall (60) between the chambers.

The argument that a honeycomb arrangement was new and unobvious is not convincing. Again the suggestion to change the geometry of the chamber placement by Kim et al. would have made the hexagonal placement obvious to those of ordinary skill in the art since they would have been expected to be well versed in elementary geometry.

In response to the argument that the reaction chamber is not disclosed in the prior art to be above the reservoir, the examiner points to Fig. 3 in which the drop chambers (i.e. reaction chambers) (32) are clearly above the solution reservoir (28).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Anderson whose telephone number is (703) 308-0086. The examiner can normally be reached on M-Th, 6:30-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (703) 305-2667. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

MAA
September 9, 2003

Matthew Anderson
A.U. 1765